Airport Shuttle Outreach

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Airport Shuttle Outreach Program

- Funded by U.S. DOE
- Niche market focus
- Goal:
 - New or major expanded use of AFVs by 20 fleets at 10 airports
- Fuel neutral
- Edwards and Kelcey, Inc. Subcontractor to Clean Vehicle Education Foundation



Why Airport Shuttles?

- Airports fastest growing transportation sector
- Shuttles are a niche within a niche
- Proven successes
- High fuel usage
- Significant market size
- Environmental benefits important
- Limited infrastructure needs
- Availability of good AFVs
- Opportunities for funding assistance



Problems Airports Face

- Competition
- Regulatory Changes Stricter Control
- Technology Changes
- Public Perceptions
- Revenue Impacts
- Growth Versus Air Quality The Future



AFVs - An Option

- Can reduce emissions
 - Regional
 - Occupational
 - Cleanliness/Odors
- Lower life cycle costs
- Improve public perception
- Improve competitiveness



Types of Applications

- Parking shuttles
- Door-to-door shared-ride shuttles
- Hotel shuttles
- Rental car company shuttles
- Regional/city connectors
- Airside shuttles



Airport Outreach Tool Kit

- Market characterization
- General outreach strategy
- Local survey protocols
- Airport case studies
- Relevant OEM vehicle information



Airport Shuttle Outreach: Phase 2

- Selected partners for airports
- Providing non-monetary support necessary to each airport outreach partner to secure at least one new AFV fleet conversion/expansion



Airport Selection

- Atlanta
- Baltimore/Washington
- San Diego
- Las Vegas McCarran
- Dulles
- Boston
- Charlotte-Douglas
- Cincinnati
- Seattle
- Palm Springs
- Pittsburgh
- Salt Lake City

- Cleveland Hopkins
- Reagan National
- Oakland
- Detroit
- San Jose
- Tucson
- Albany
- St. Louis
- Newark
- Philadelphia
- Raleigh Durham



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Outreach Partner Responsibilities

- Coordinate long term, persistent, consistent marketing to airport shuttle fleets
- Build the needed relationships
- Make the sale(s)



CVEF Support for Partners

- Successful strategy
- Assistance with detailed local marketing plans
- Training in airport issues for local partner group
- Technical support
- On-call in-person contact at critical points



CVEF Support for Partners (Cont.)

- Linkage to OEMs
- Linkage to National Accounts
- Individualized workshops at local airports in special cases
- Educational tours for local fleet operators in special cases
- Information Tool Box

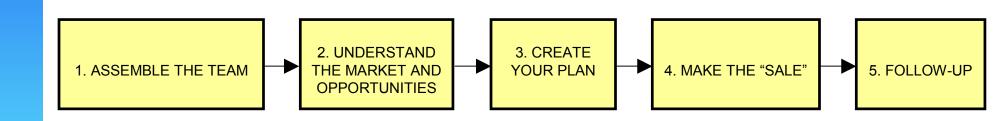


Survey of Four Airports

- BWI 80 companies with shuttles
 - Only 6% had more than 100 trips/day
- Dulles 90 companies with shuttles
 - Only 3 with more than 50 trips
- Reagan National Taxis and public transportation dominate
 - Four primary shuttle companies
- Philadelphia 40 companies with shuttles
 - Rental Car Shuttles dominate

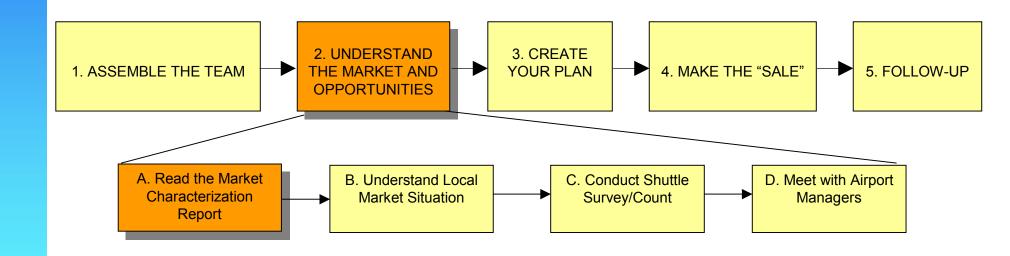


General Strategy Sequence





Understand the Market





Investigate Local Infrastructure

Investigate local fueling infrastructure to determine:

- •What fuels are available?
- •How convenient is the station to the airport?
- •Has it been reliable?
- ■For CNG, is there only one compressor or two, providing some level of back-up?
- •Where is the next closest station?
- •How many vehicles can be filled at the same time?
- •How fast can vehicles be refueled?
- For CNG stations, what is filling pressure?
- •What size vehicles can be accommodated?
- •What are the hours of operation?
- ■How is purchase made (credit card, debit card, contract card, punch code, cash, other)?
- Is access to the pump proprietary or can anyone obtain fuel there?
- Can capacity be easily expanded?



Survey/Count at Airport

The "Watch and Learn Survey"

- ■Visit the airport for an initial look at terminal shuttle traffic.
- Learn peak times for passenger pick up and drop off and identify major shuttle operators.
- •Identify ideal locations for surveyors to observe shuttle traffic. More than one surveyor usually needed.
- ■Decide whether to conduct a one-day or a partial-day survey.
- ■Prepare a survey form to use.
- Prepare instruction sheet for surveyors.
- ■Visit surveyors after several hours to identify problems with process.
- ■If a partial-day survey is used, extrapolate for full day estimate.
- ■Collate and analyze results.
- Prioritize target fleets.



Survey Form

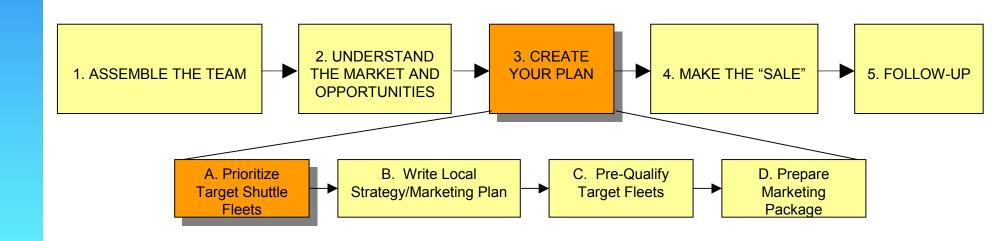
Example Survey Field Tally Sheet

| Location: |
|-------------|
| Surveyor: |
| Date: |
| Time Begun: |

| Company Name | | Vehicle ID | Vehicle Type (Check one) | | | | | Phone No. |
|--------------|--|---------------|--------------------------|---------|--------|--------|-------|-----------|
| | | | Van | Cutaway | Lg Bus | Sm Bus | Other | |
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| etc | | | | | | | | |

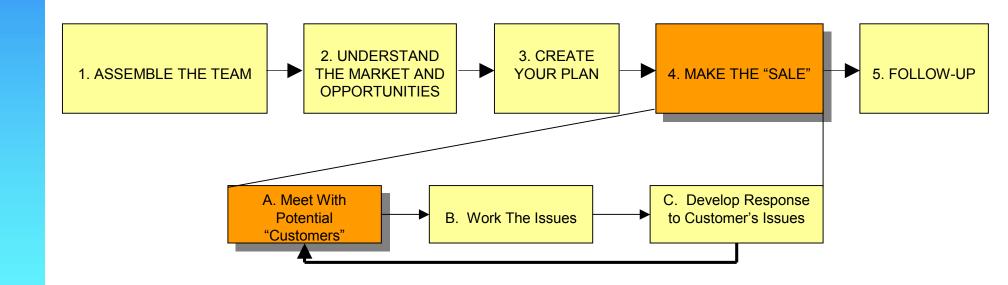


Create a Local Strategy/Plan





Make the "Sale"





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Follow-Up

